

Appendix B

Installation Instructions for AWIPS Release OB3 Lessons Learned/Addendum

Date: 06/23/04

CAUTION

Assumption: It is assume that you are using the version of the installation installations dated **3/5/04**. This is also the version that is found on the installation web page:

http://www.ops1.nws.noaa.gov/awips_software.htm

If you do not have this version, obtain it now.

Purpose: Replace the pages from the OB3 installation instructions document on the web page above (**dated 03/5/04**), with the updates included in this lessons learned/addendum (**dated 06/23/04**).

Chapter	Page # New Version	Comments	Directions
Part 0	page 0-4	steps 6 and 7 were updated	Replace existing page (0-4), with updated one.
Part 0	page 0-8	step 13 updated	Replace existing page (0-8), with updated one.
Part 4	page 4-1	step 3 updated	Replace existing page (4-1), with updated one.
Part 14	page 14-1	step 1,a updated	Replace existing page (14-1), with updated one.
Part 14	page 14-3	step 1, j added	Replace existing page (14-3), with update one.
Part 14	page 14-4	step 1, k added	Replace existing page (14-4), with update one.

PART 0: Pre-installation Activities (complete before day of install)

Change pages and modified steps for part 0 include:

page 0-4, step 6 last bullet added

page 0-4, step 7 bullet 4 modified

page 0-8, step 13 updated

CAUTION

As a result of RPS list changes, sites with dedicated radars should go to attachment D entitled Preserving RPS Lists and do the procedure outlined. Failure to do attachment D could result in you having to create your customized RPS lists from scratch.

- Not really a file, but you should advise your radar focal point to save some samples of customized color curves. Beta sites have noted that the colors sometimes get compressed during the upgrade, and the radar focal point may need to recreate the customized color curves after the upgrade.
- Customized awipsusr crons on any workstations should be saved to a safe directory.
- If you made localized changes to /awips/fxa/awipsusr/.gnome/awipsStartupMenu or /awips/fxa/data/awipsStartCmds*.conf, you should back up those changes in a safe directory, since those files will be replaced with the install.
- Secure a good LDAD backup a week or so before the upgrade. Use System Administration Note 12 entitled "LDAD Backup and Restore Procedure."
- The current Archive Setup in /awips/archiver/arch_root/config on the AX will not be saved off. If you modified any of the 8 config (.cfg) files, save them off for future reference.

7. **Automatic file backup and restore information.** Unless told otherwise, the following lists files from each part of the installation that are automatically backed up and restored during the installation. However, you may wish to manually back up other files that are specifically stated that they will not be saved off.

- In Part 2, Install Linux Software
No files will be saved off.
- In Part 3, Install OB3 CP Software
No files will be saved off.
- In Part 4, Install OB3 Archiver Software
No files will be saved off.
- In Part 5, Install OB3 LDAD Software
The ROB2 versions of files mentioned in Attachment A section A, will be saved off to /px2data/BACKUPLDADOB2 by the script called installLDADOB3. The OB3 versions of these files will become operational.
- In Part 6, OB3 MSAS Script
MSAS files listed in Attachment A, section B will be updated. The replaced files will be saved to /data/fxa/BACKUPMSASOB2.

For example, we highly recommend that you take the **latest version** of the following file:

- a. /awips/fxa/data/localization/LLL/LLL-hydroSiteConfig.txt
and copy it to both **PX1** and **PX2** to the subdirectory called:
/awips/fxa/data/localization/LLL/LLL-hydroSiteConfig.txt

NOTE: The LLL-hydroSiteConfig.txt file should not be placed into the /data/fxa/customFiles directory.

In addition, we highly recommend that you take the latest version of the following 2 files:

- b. /awips/fxa/data/localization/LLL/LLL-acqPatternAddOns.txt
- c. /awips/fxa/localization/LLL/LLL-portinfo.txt

and place them either into the /data/fxa/customFiles directory or localization/LLL directory on PX2.

13. Remove radar depict keys file from customFiles and localization directories.

There are significant changes in the Radar Depict Keys for OB3. Therefore, check and **remove** any ***radar*template** files in /data/fxa/customFiles and also from /awips/fxa/data/localization/LLL on every device (DS, AS, LX, PX). Be sure and check /awips/fxa/data/localization/LLL on PX2 since the main install localization for OB3 will be run there. You can save a copy in a safe directory for reference if your site decides to customize the depict keys sometime after the upgrade. **Examples** of these files are :

```
LLL-radarDepictKeys.template  
radarDepictKeys.template  
LLL-radarDataKeys.template  
LLL-radarDataMenu.template  
LLL-radarProductButtonInfo.template  
radarProductButtonInfo.template  
LLL-radarMultiLoadInfo.template
```

Procedure:

From **PX2** as root:

1. cd /data/fxa/customFiles
2. ls -l *radar*template

If any files are returned, you must remove or relocate them to another directory.

3. cd /awips/fxa/data/localization/LLL (where LLL is your localization ID)
4. ls -l *radar*template

If any files are returned, you must remove or relocate them to another directory.

5. Repeat steps 3 and 4 after logging in to PX1, DS1, DS2, AS1, AS2, and each LX

workstation.

If these type files are not removed, the radar menu system on D2D will not work after the OB3 upgrade.

14. **Backup local environment and radar meteorology procedures.** Because the radar depict keys are changing in OB3, you will also need to do the following in order to make sure that site meteorological procedures that contain radar products still work after OB3 is installed. First you will delete some old directories, if they exist, and then run two scripts to produce the backup information. The backUpLocEnv script will save a reference of the OB2 depict keys and the backUpProcedures script will save a copy of your OB2 procedures. You will run additional scripts in the post-install (Part 14) in order to convert the procedures to the new depict keys after the upgrade. On **LX1** as **root** run the following commands:

```
mkdir -p /local/install      Note: This may already exist at some sites  
chmod 777 /local/install
```

```
script -a -f /local/install/preRadarpatch.out  
rm /awips/fxa/data/procRedefinitions.522
```

PART 4: OB3 Install OB3 Archiver Software

Change pages and modified steps for part 4 include:

page 4-1, step 3 was modified.

PART 4: Install OB3 Archiver Software

Automatically Saved and Restored Information:

No files will be saved off..

This applies to both RFCs and WFOs.

1. From **PX2** as **root**, run the "installAX_OB3" script to install the Archiver software. (Sample output and error information are shown in the Script Log Output, page A4-1.)

NOTE: This loads the default configuration.

```
script -a -f /local/install/installAXOB3.out
```

```
cd /mnt/cdrom
```

```
./installAX_OB3 (This step can take up to 5 minutes.)
```

```
exit
```

2. Review the script output file, "/local/install/installAXOB3.out," to ensure that no unexpected errors were encountered during the installation.
3. If you saved off the archive setup files in part 0, step 6 because you have modified your archive setup in previous releases, you may wish to obtain these now. If you customized any of these 8 archive config (.cfg) files, you will need to merge site-specific changes back into the OB3 version of the archive config files.

If no errors occurred, proceed to **PART 5**, otherwise contact the NCF.

PART 14: OB3 After-Install Procedures

Change pages and modified steps for part 14 include:

page 14-1, updated step 1a

page 14-3, add steps 1, j.

page 14-4, add steps 1, k.

PART 14: OB3 After-Install Procedures

The following procedures **MUST** all be completed as part of the OB3 upgrade. Procedures 1-4 must be run on the day of the install, if applicable. Procedure 5 must be done before you go into backup mode.

1. Miscellaneous Post install procedures
2. LDAD Post Install Procedure
3. OH Post Install Procedure
4. Maintenance Release(s) for OB3
5. Rerun Localization for your backup sites
6. Users of XNOW may want to fix a spell check bug (optional)
7. Modifying WarnGen templates to create segmented products (optional)
8. Making additional changes to Radar Depict Keys (optional)
9. Secure a Good LDAD Backup

Procedure 9 needs to be done...but not on the day of the upgrade. It can be **done within a week or so after the rest of the install.**

1. Miscellaneous Post install procedures (should do on day of upgrade)

- a. **WFO systems only.** The binaries that AvnFPS 2.0 and AvnFPS 2.1 uses in OB3 are different than what they were in OB2. Therefore, a script needs to be run now to convert to the new binaries. One script was delivered with the AvnFPS 2.0 package and a second was delivered with AvnFPS2.1.

These steps must be completed before AvnFPS can be run.

On **DS1** as **root**:

```
cd /data/local/avnfps
```

If you were at AvnFPS 2.0, the command to type is:

```
./upgradeAVNFPS2.0.OB3.sh $(pwd) /AVNFPS2.0.OB3delta.tar.gz
```

If you were at AvnFPS 2.1, your command is:

```
./upgradeAVNFPS2.1.OB3.sh $(pwd)
```

Start the AvnFPS GUI from the AWIPS Start menu. Both the "Data Svr" and "Xmit Svr" should be red indicating the servers are not running. Simply click on both buttons to start. They will turn Green indicating the servers are running.

- b. The number of OSB products needs to be reduced from 12 to 2 in order to save database space. This step takes up to 30 minutes to complete depending on the number of products in the fxatext database.

On **DS1** as **root**:

```
cd /home/awipsadm/scripts
./change_versions.sh OSB 2
```

- c. **Run setupSSHkeys script.** It is possible that some of the ssh keys were altered during the install of OB3. Run the following script to realign the keys.

LX1 back to the correct procedures:

```
/awips/fxa/bin/selectProcs  
exit          (exits the postRadarpatch script)
```

e. OB3 WWA Updates (Operational WFOs)

Updates to a number of existing templates were delivered in OB3. As mentioned in Part 0, step 8, most of those updates were fixes to bugs found in the OB2 templates or were updates due to new directives. Sites that have customized their OB2 templates may have already discovered the bugs and/or made the directive changes themselves. However, your WWA focal point should verify that all of those changes are in your site's customized files as soon as possible after the upgrade.

In addition, there are new templates in OB3 that your WWA focal may wish to customize. Do this as time permits.

Information on the new and updated templates can be found at:

<http://www.nws.noaa.gov/mdl/wwa/docs/OB3/WWA-OB3-NEW.pdf>

- f.** Check local application programs that use perl. Note that perl was updated from 5.61 to 5.8. Therefore, if any of your local applications have /usr/local/perl5.6/bin referenced, you should update it to the static path of /usr/local/perl/bin/perl.
- g.** Radar check. Ensure that radar products are not only received locally, but that they are also are being sent out over the WAN. At one beta site this was a problem. Sites can monitor the external receipt of radar products by going to the following web site.

<http://weather.noaa.gov/monitor/radar>

If products are not received call your install support person.

- h.** Check the netscape bookmarks on the LX workstations. The bookmarks such as NDFD were missing on the netscape monitor at some beta sites. Your old bookmarks will be stored as:

/awips/fxa/awipsusr/.netscape/bookmarks.html.old

The new bookmarks will be stored as:

/awips/fxa/awipsusr/.netscape/bookmarks.html

- i.** Merge your old bookmarks into the new bookmarks file.

- j.** A site can use the backed up files (***radar*template**), listed in part 0, step 13 if pertinent to your site, to merge localizations into the new baselined radar files from nationalData, and put them back into their localization/LLL or data/fxa/customFiles directories.

- k. Operational WFOs should examine ds1:/awips/adapt/ifps/data/prim_sec_bak.txt. It will contain the WFO id followed by the primary and secondary backup sites for each WFO. If the file is incorrect for your site, edit and correct it. The file is owned by the ifps user and has permission 444.

2. **LDAD Post Install Procedures (must be done on day of upgrade):**

If the baseline OB3 files listed in Attachment A section A are acceptable, because you did not make customized changes to any of them, you can skip the rest of this section.

After installing OB3, as needed, merge site-specific changes from your ROB2 version of these or other files listed in Attachment A section A into the new ROB3 files. Follow steps a through e, below, to perform the changes and activate the modifications.

- d. Login to DS1 as user **ldad**.
(Note that for ls1 files, you will need to login to ls1 as the ldad user).
(Note that for AS1 files, you need to login to AS1 as the ldad user).
- e. As needed, merge your customized changes from the ROB2 file into the OB3 file. The "diff" command may help you find the changes. Use the vi editor to merge in these changes:

```
vi /awips/fxa/ldad/data/example.pl
```
- f. Copy the updated OB3 file to DS2 to ensure that you don't have problems during fail-overs. (Note: for ls1 files, don't copy to ds2.) (Note: Locally edited files on DS1 [AS1], should be copied to DS2 [AS2]).
- g. Repeat the steps above, for other activated files which need customized changes merged into them.
- h. Once modifications have been made, do the following to restart LDAD:

```
cd /awips/fxa/ldad/bin
stopLDAD.sh
startLDAD.csh
```

3. **OH Post install Procedures (must be done on day of upgrade)**

WFOs and RFCs:

- a. Create new geographic binary files required by HydroView/MPE. Go to Attachment B for information on the steps required to this.
- b. Adjust file retention criteria for the Multi-sensor Precipitation Estimator files if needed in order to reduce disk space usage. These file accumulate for each hour and the number of days of retained data may need to be reduced. This problem was noted in AWIPS testing for the Alaska sites. If sites are already running MPE operations and are not having disk-space problems, there is probably no need to adjust the retention criteria.
If there is a need to adjust the retention, then edit the script
`/awips/hydroapps/precip_proc/bin/purge_mpe_files`. This file uses the "find" command to find old files; to adjust the retention period, adjust the "mtime ###" line accordingly. This number is in units of days, and is offset by 1, so